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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,088	09/30/2003	Jung-Seon Park	CU-3336 VE	4762
26530 7590 09/06/2007 LADAS & PARRY LLP 224 SOUTH MICHIGAN AVENUE SUITE 1600 CHICAGO, IL 60604			EXAMINER KARLS, SHAY LYNN	
			ART UNIT 1744	PAPER NUMBER
			MAIL DATE 09/06/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/675,088	<b>Applicant(s)</b> PARK ET AL.	
	<b>Examiner</b> Shay L. Karls	<b>Art Unit</b> 1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,13,16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-11, 13, 16, 18-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION*****Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the corresponding receptacle which receives the second guiding member (claim 16) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 13 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim states that the “main body has a corresponding receptacle into which the second guiding member is received”. This limitation is not supported in the original specification or drawings. Figure 4 is the best drawing for showing the second guiding members and there is no support for a “corresponding receptacle”. The applicant is asked to removed this limitation from the claim or explicitly point out in the disclosure where the “corresponding receptacle” is supported.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-11, 13, 16, 18-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 states that the connecting portion further comprises “at least one of a 1) at least one guiding member that protrudes upwardly from the connecting portion, and 2) a convex seating guide that protrudes upwardly from the connection portion, a guiding member and a

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mating seating guide on the connecting portion being received into the corresponding receptacles on the main body.” This is confusing to the examiner since it is unclear whether the second option for the claim includes the limitation of a guiding member and a mating seating guide on the connecting portion or if that limitation is to be considered with either options. If the limitation is to be considered with only one of the options, then the claim is unclear since the device is not required to have both a guiding member and a seating guide. The claim only needs to have at least one guiding member or a seating guide and the limitation that the guiding member and seating guide are received into the corresponding receptacles is confusing then since both are not positively claimed.

Claim 16 includes limitations directed towards the convex seating guide. This is confusing since the convex seating guide is not positively claimed in claim 1. Claim 1 states that the connecting portion comprises at least one of a 1) at least one guiding member and 2) a convex seating guide. The device is not required to have both limitations but only one of the limitation. Therefore, claim 16 is indefinite since the convex seating guide is not positively claimed. The applicant needs to positively claim the seating guide and then claim the limitations regarding the seating guide.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 1, 3-7, 10-11, 13, 16, 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downey et al. (USPN D493587) in view of Weaver et al. (USPN 5524321).**

Downey teaches a vacuum cleaning handle portion for drawing in air having dust and dirt. See attached figures for labeled elements. There is a main body including a body frame, a dust collector connected to the body frame and a drive motor (figure 1). There is a frame assembly including a frame body (figure 1) and a connecting portion (figure 1, 5 and 7) formed with a lower part of the frame body. The frame body further comprises a front casing facing forward with respect to the vacuum cleaner and a rear casing coupled to the front casing (figure 5). The frame body is shaped to correspond to an outer circumference of the main body (figure 1).

With regards to claim 3, the frame assembly further comprises a support (not visible in the figures because the main body is being supported on it, but it is the top surface of the connecting portion) for supporting the main body.

With regards to claim 4, the frame assembly further comprises a connecting guide for removable connecting accessories to the vacuum cleaner (figure 3).

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With regards to claim 5, the frame body further comprises a wheel (figure 1) connected to the lower part of the frame assembly.

With regards to claim 6, the main body of the vacuum is connected to the dust collector (figure 1) and further comprises a dust receptacle (inside of dust collector) removably connected to the body frame for collecting dust and dirt. There is a button formed at an upper part of the body frame (figure 1).

With regards to claim 7, the frame assembly further comprises a frame handle (figure 1) disposed at an upper part thereof, and there is a handle groove (figure 1) disposed at a position corresponding to the button of the main body of the vacuum cleaner.

With regards to claim 10, the connecting portion comprises a communicating member (figure 7) formed at the main body of the vacuum.

With regards to claim 11, there is a power connector disposed on the lower part of the main body (figure 7).

With regards to claim 19, there is an on/off switch (figure 1) disposed at a front part of the main body.

Downey teaches all the essential elements of the claimed invention however fail to teach a nozzle that the vacuum handle portion is pivotally attached to (claim 1). Weaver teaches a vacuum cleaner with a main body (14) connected to a frame assembly comprising a nozzle and frame body. The nozzle of Weaver comprises a communication hole (210; figure 4) through which the air drawn in through the nozzle assembly is directed to the main body of the vacuum (claim 10). Weaver also teaches a nozzle comprising a power port (216; figure 7) providing power from the main body (claim 11). The nozzle has at least one guiding member on a

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connecting portion (200) that protrudes upwardly from the connecting portion (claim 1). There is a second guiding member corresponding to the first guiding member on the lower part of the main body (see figure below) (claim 13). The at least one guiding member is shaped in to a convex protrusion (cross section shows a convex shape in figure below) and the second guiding member is shaped in to a concave groove (cross section shows a concave groove in figure below) (claim 13). The main body has a corresponding receptacle into which the second guiding member is received (portion 44 of figure 7 receives the concave second guiding member).

Weaver also teaches a nozzle having a connecting portion that include a shaft member (230, 232) extending downward for pivotally connecting the shaft member with the nozzle (claim 18). The shaft is received in recesses (264, 266) for pivoting. Weaver's vacuum also comprises a first fixing portion (250) formed at the upper part of the nozzle (16) and a second fixing portion (lower surface of 200) formed at the lower part of the frame assembly (18). The first fixing portion corresponds to the second fixing portion to provide a connection between the connecting portion and the frame assembly (claims 20 and 21).

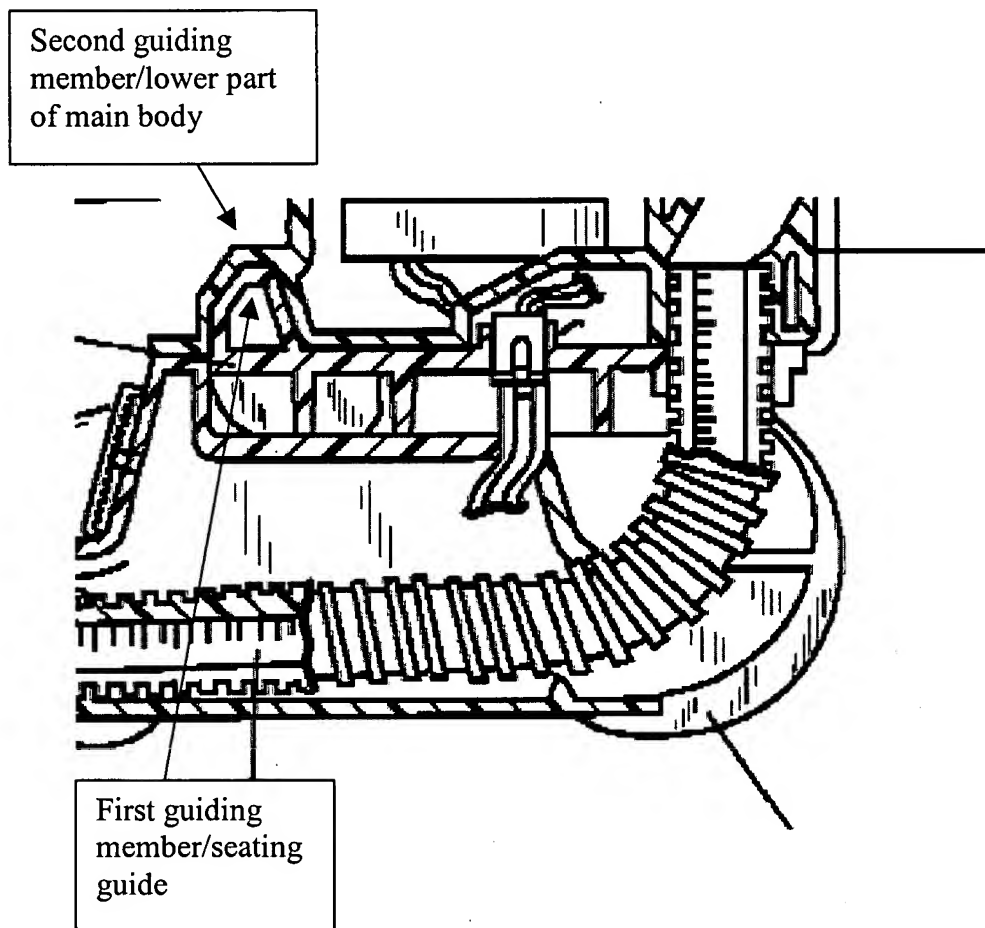
It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pivoting nozzle assembly as taught by Weaver on the frame assembly as taught by Downey and modify the lower surface of the main body so that the communicating member and power connector of Downey match up with the communication hole and power port of Weaver, as well as modify the shape of the lower surface of the main body so the guide members fit together. Modifying the shape of elements are considered to be within the level or ordinary skill in the art. MPEP 2144. Since Downey is silent as to the type of nozzle used with



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the handle assembly, it would have been obvious to use any nozzle that is capable of operating with a detachable main body such as the one taught by Weaver.

Regarding claim 21, the fixing portions of Downey in view of Weaver are not convex or concave but are rectangular. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use convex or concave fixing portions because Applicant has not disclosed that convex or concave fixing portions provide an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected Applicant's invention to perform equally well with either the shape as taught by Downey in view of Weaver or the claimed convex/concave shape because both shapes perform the same function of providing a connection between the connecting portion and the frame assembly equally well.



**Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Downey in view of Weaver as applied to claim 1 above in view of Ohta et al. (USPN 6859975).**

Downey and Weaver teach all the essential elements of the claimed invention however fail to teach that the button is integrally formed with a connecting projection so that the connecting projection moves together with the button (claim 8). Also that there is a connecting recess that is slanted (claim 9) disposed in the frame body of the frame assembly shaped and dimensioned to correspond to the connecting projection (claim 8). Ohta teaches a vacuum cleaner with a removable canister cover. The cover comprises a button (48) located at the top

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portion of the cover that is integrally formed with a connecting projection (vertical extension of 48b that engages 1a, see figures 3-4 and col. 7, lines 1-4) that moved together with the movement of the button. There is a connecting recess (1a, col. 7, lines 1-4) disposed in the frame body of the frame assembly shaped and dimensioned to correspond to the connecting projection. The connecting recess is slanted (1a, figure 3 shows a portion of 1a that is slanted at a downward angle). Ohta's handle (47a) comprises a handle recess that corresponds to the button operation of the main body. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Downey's main body to include a quick release button corresponding to the handle groove, as taught by Ohta so that the main body can be released from the frame assembly with a one handed operation for quick use when cleaning tight spaces that are not feasible for the nozzle.

### ***Response to Arguments***

Applicant's arguments filed 7/10/07 have been fully considered but they are not persuasive.

The applicant argues that no reference or combination of references show or suggest a guide member and a seating guide that is also convex. In response, on page 7, paragraph 4 of the applicant's remarks/arguments, the applicant states that claim 1 has been amended to include *one or both* of a guiding member and a convex seating guide (emphasis added). Additionally, claim 1 has been amended to state that the connecting portion comprises at least one of 1) a guiding member and 2) convex seating guide. It is clear that the claim is only required to have one of the elements and not both as pointed out by the claim language and by the applicant's arguments. Therefore Downey in view of Weaver clearly teach at least one guiding member protruding

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upwardly as claimed. The references are not required to have a convex seating guide since it is claimed as an alternative to the guiding member. Thus the rejection of Downey in view of Weaver is being maintained since all the claimed limitations are met.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shay L. Karls whose telephone number is 571-272-1268. The examiner can normally be reached on 7:00-4:30 M-Th, alternating F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on 571-272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Shay L Karls  
Patent Examiner  
Art Unit 1744

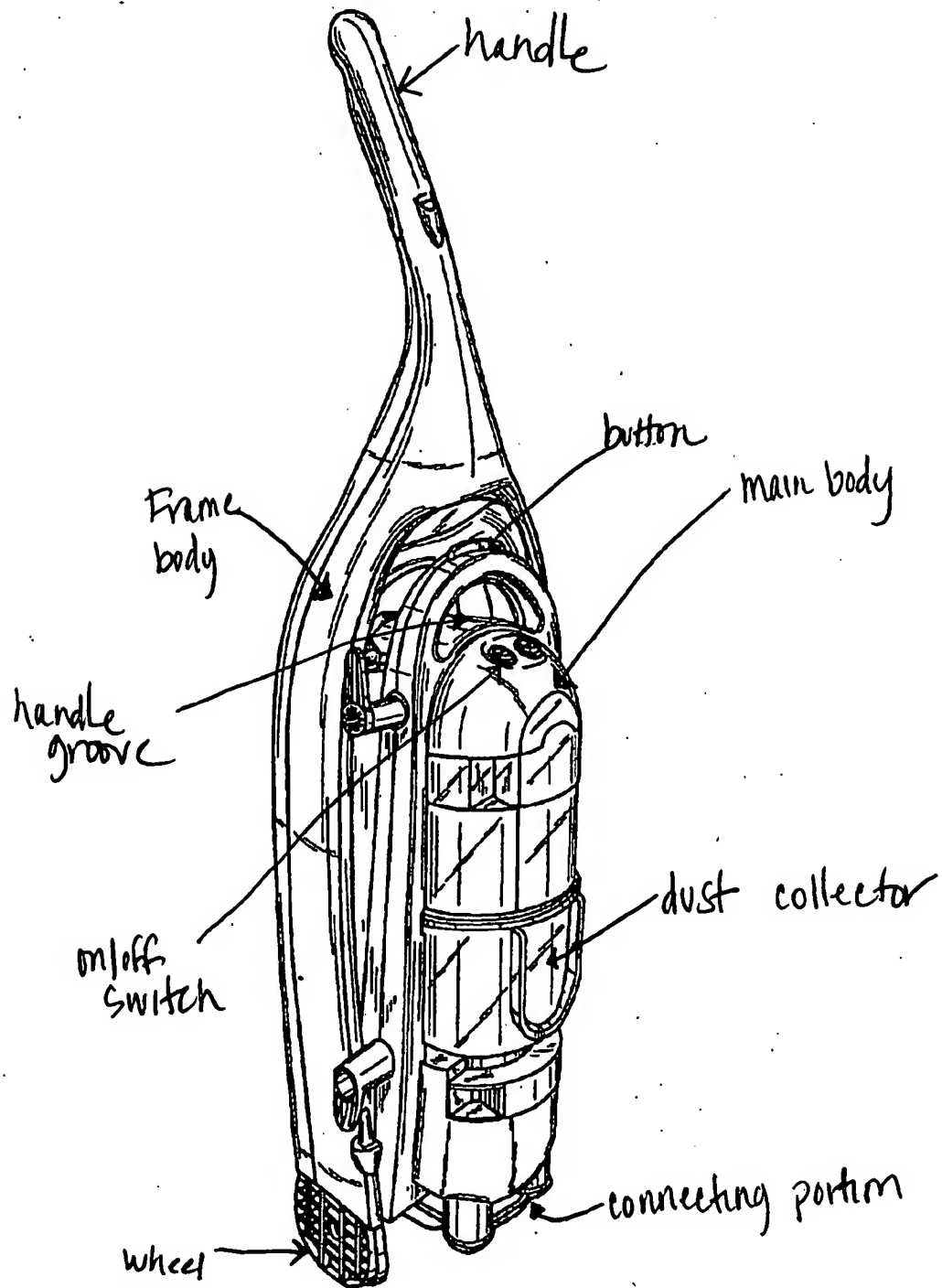
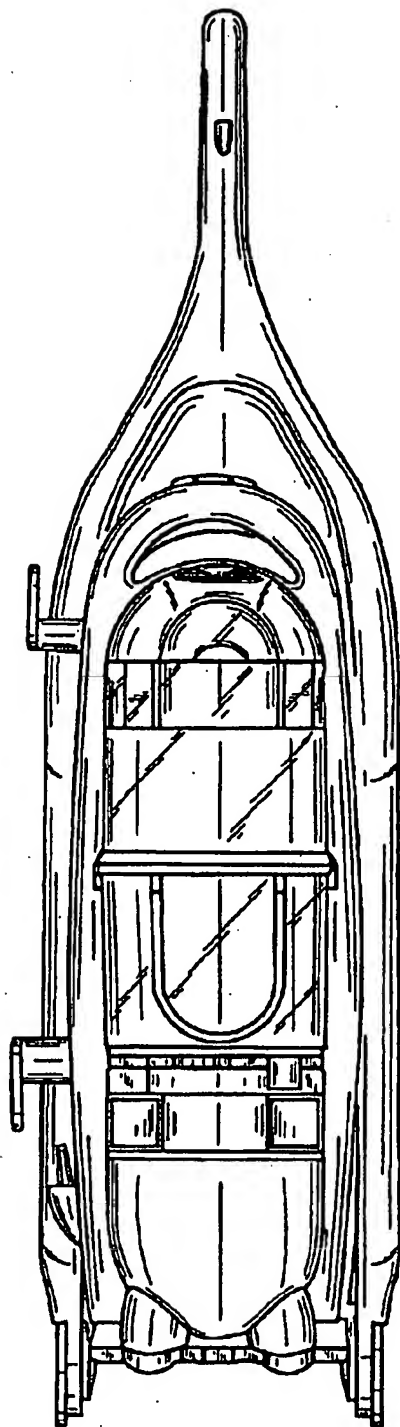
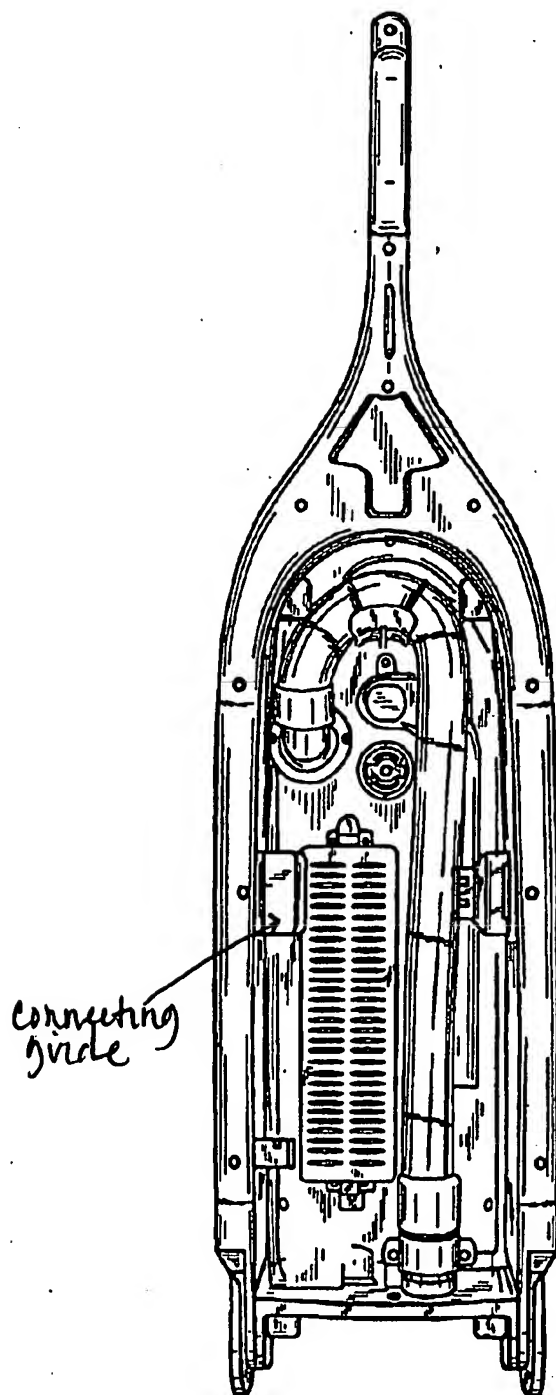


Fig. 1

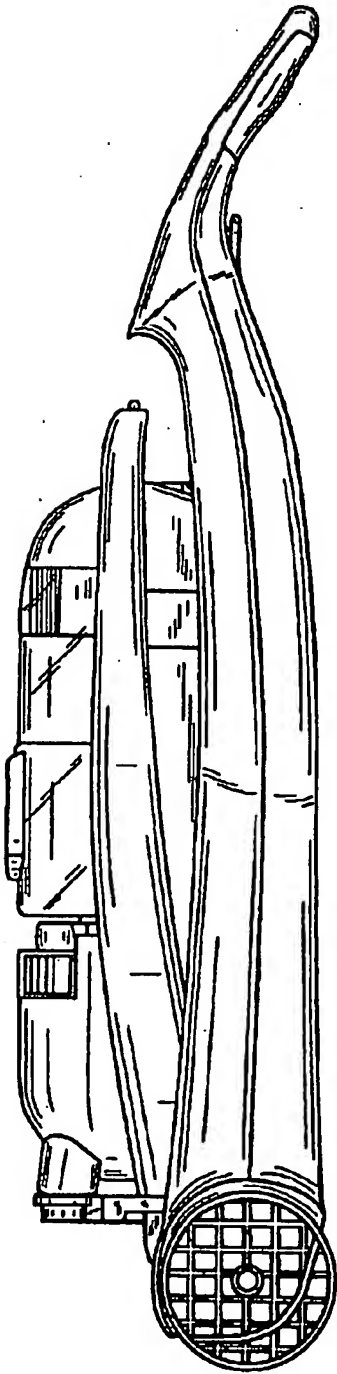


**Fig. 2**

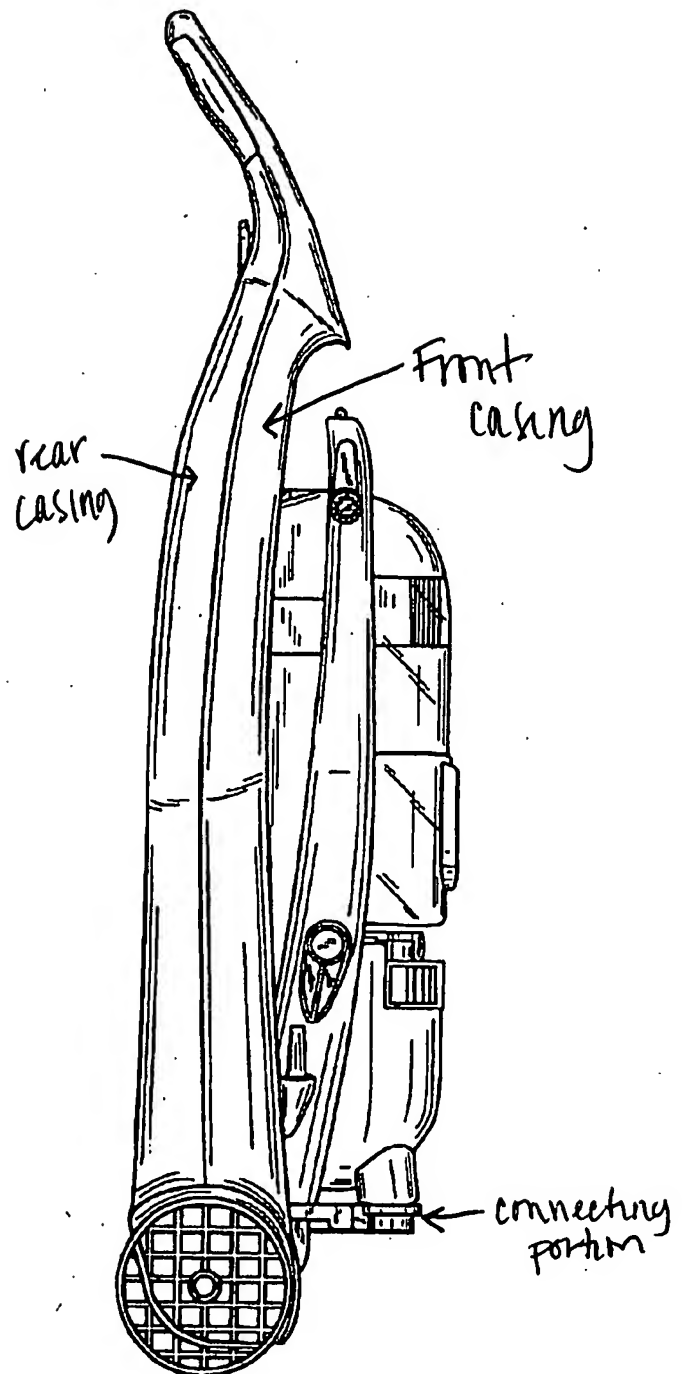


**Fig. 3**

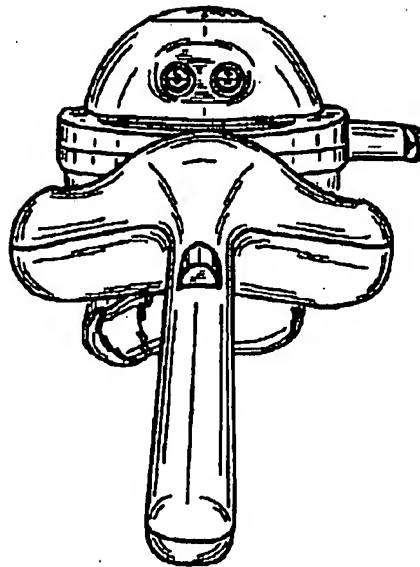




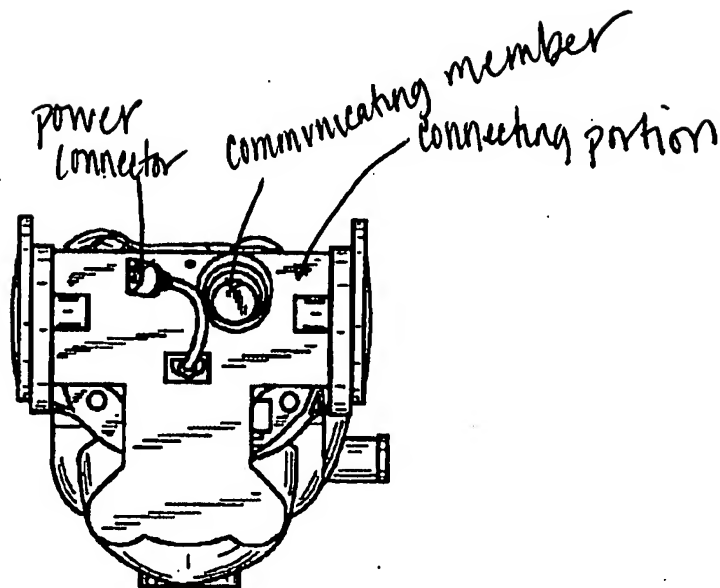
**Fig. 4**



**Fig. 5**



**Fig. 6**



**Fig. 7**